

DEPARTMENT: Environmental Services

REPORTS TO: Civil Engineer, Division Manager

SUPERVISES: None

DEFINITION:

Performs technical work in support of engineering, survey, mapping, and public development functions for public works. The work involves applying intermediate scientific and technical knowledge to projects and assignments. Office work involves data maintenance, analysis or computations aided by computers, technical research and review and may involve frequent public contact. Field work may include on-site information gathering and interaction with private contractors and the public.

DISTINGUISHING CHARACTERISTICS:

This class is distinguished from the Engineering Technician I class by greater responsibility, independence and complexity of assignments. Engineering Technician II's perform work at journey level and are assigned responsibility for projects and assignments of a larger scope or varied portions of larger projects. It is distinguished from the Engineering Technician III class in that employees in this class perform work under closer supervision, and carry out assignments that are less technically difficult. Engineering Technician III's perform work at the advanced journey level and have greater responsibilities for the technical management of entire projects which may include contract and construction management, scheduling, cost estimates, inspection and coordinating legal processes.

ESSENTIAL JOB FUNCTIONS-- (Any one position may not include all of the duties listed nor do the listed examples include all tasks which may be found in positions of this class.)

All functions:

Responds to inquiries and complaints from property owners, businesses and the public regarding engineering projects, sewer, storm water and water system locations, plans for future developments and the like.

Performs technical research, review and analysis as requested including report preparation.

Develops, maintains and updates various databases.

Completes special assignments as directed by the supervisor.

Engineering function:

Performs a variety of drafting and design assignments using manual and computerized methods; prepares drawings for engineering projects under preliminary design, design and as-built mapping; creates and updates drawings, maps, graphs and charts for engineering uses.

Prepares correspondence and reports, researches and compiles contract documents, contracts, bid reviews, and provides preliminary bid analysis for contract awards.

Survey function:

Assists in laying out and conducting surveys for sanitary sewer, storm water, or water system projects, easements and other engineering activities.

Operates a variety of survey equipment.

Performs survey computations.

Mapping function:

Under direction, performs intermediate level tasks associated with maintaining and updating layers of the Geographic Information System (GIS).

Develops and maintains relational database data and performs a variety of spatial analyzes.

Responds to requests from staff and the public for GIS data and assists staff and public in use of GIS data. May represent department section on GIS development and utilization issues.

Prepares maps displaying layers and attribute data from the database, using cartographic techniques.

Development function:

Performs front line customer service duties for development customers.

Sets up, closes out and maintains project files involving reviewing and preparing cost codes, plan review for conformance to standards, document checks, deposit reconciliations, and correspondence.

Assists and supports Engineering Development Specialists as requested involving extensive technical research on codes, easements, permit costs, and development impacts on property.

OTHER JOB FUNCTIONS:

Performs other related duties as assigned.

WORKING CONDITIONS:

Duties are primarily performed in an office environment while sitting at a computer terminal or drafting table. Physical effort is required to lift and carry items weighing up to 50 lbs. When field work is required, exposure to varying weather conditions, rough terrain, confined spaces, and traffic may be experienced.

QUALIFICATIONS: (Not all knowledge, skills and abilities will apply to each functional area.)

Knowledge of:

- Principles and practices of technical engineering and surveying.
- Principles, practices, techniques and instruments related to area of assignment.
- The use of computers and applicable computer applications for drafting, mapping, locating, record keeping, and other engineering purposes.
- Legal requirements, code and compliance issues related to area of assignment.
- Basic knowledge of specification writing and cost estimating techniques.
- Data gathering and research skills.

Ability to:

- Read and interpret technical materials such as engineering plans and specifications, maps, computer manuals, code provisions, state and federal regulations and guidelines.
- Operate a variety of electronic surveying equipment.
- Operate automated drafting and mapping equipment.
- Perform skilled mechanical drawing, surveying and related computations.
- Use applicable computer applications effectively in support of functional area.
- Prepare clear and concise records, reports and files.
- Gather and correlate data from a variety of sources.
- Establish and maintain effective working relationships with other employees and the public.
- Communicate effectively, both orally and in writing.
- Physically perform the essential functions of the job.

Education and Experience -- Any equivalent combination of education and experience which provides the applicant with the knowledge, skills, and abilities required to perform the job. A typical way to obtain the knowledge and abilities would be:

Graduation from high school or GED.

Three years progressively responsible technical engineering related work.

Licenses, Certificates, and Other Requirements:

Valid Driver's License.